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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,931	10/03/2003	Robert P. McCollum	13174.42US11	1210

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MINNEAPOLIS, MN 55402-0903

EXAMINER

THOMPSON, CAMIE S

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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10/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/678,931	Applicant(s) MCCOLLUM ET AL.	
	Examiner Camie S. Thompson	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed July 11, 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27,28,32-41 and 43-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-28, 32-41 and 43-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's amendment and accompanying remarks filed July 11, 2007 are acknowledged.
2. Examiner acknowledges amended 27-28, 32-34 and 37-41.
3. Examiner acknowledges cancelled claims 29-31 and 42.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 27-28, 32-36 and 43-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over El Bouhnini et al., U.S. Patent Number 4,242,406.

El Bouhnini discloses a structural laminate that can be used as a sink or tub wherein the laminate is comprised of four layers (see column 1, lines 5-15 and lines 42-54). The reference discloses that the first layer is an exterior layer and comprised of acrylic and has a thickness of from about 15 to 25 mil (column 2, lines 15-35). Additionally, the reference discloses a second layer comprising an organic resin capable of curing at room temperature such as acrylic (see column 2, lines 41-55). It is disclosed in column 5; lines 59-68 that the third layer comprise an organic resin. The fourth layer in the reference is disclosed as a fiber-reinforced layer wherein the

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reinforcing fibers are glass fibers (see column 6, lines 30-43). It is disclosed in column 5, lines 40-41 that polyurethane can be used in the reinforcing layer. The reference does not disclose the use of an acrylic for the third layer. However, the reference does disclose that the third layer is an organic resin. Acrylic resin is a good bonding agent. Therefore, it would have been obvious to one of ordinary skill in the art to recognize that acrylic resin could be used in the third layer of the El Bouhnini reference in order promote adhesion.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over El Bouhnini et al., U.S. Patent Number 4,242,406 in view of Domine et al., U.S. Pre Grant Publication 2004/0161623.

El Bouhnini discloses a structural laminate that can be used as a sink or tub wherein the laminate is comprised of four layers (see column 1, lines 5-15 and lines 42-54). The reference discloses that the first layer is an exterior layer and comprised of acrylic and has a thickness of from about 15 to 25 mil (column 2, lines 15-35). Additionally, the reference discloses a second layer comprising an acrylic (see column 2, lines 41-55). It is disclosed in column 5; lines 59-68 that the third layer comprises an organic resin. The fourth layer in the reference is disclosed as a fiber-reinforced layer wherein the reinforcing fibers are glass fibers (see column 6, lines 30-43).

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It is disclosed in column 5, lines 40-41 that polyurethane can be used in the reinforcing layer.

The reference does not disclose the use of an acrylic for the third layer. However, the reference does disclose that the third layer is an organic resin. Acrylic resin is a good bonding agent.

Therefore, it would have been obvious to one of ordinary skill in the art to recognize that acrylic resin could be used in the third layer of the El Bouhnini reference in order promote adhesion. El Bouhnini does not disclose that the structural laminate is a vehicle component or boat. Domine discloses a four-layered composite that can be used in vehicle components or a boat (see paragraphs 0135-1036). Composites are used in various materials. Composite material can form shaped articles. Therefore, it would have been obvious to one of ordinary skill in the art that the composite or structural laminate of the El Bouhnini reference can be used in an automotive component or a boat.

Response to Arguments

Applicant's arguments filed July 11, 2007 have been fully considered but they are not persuasive. Applicant argues that the structure of the El Bouhnini reference is different from the structure of the present claims. Applicant argues that the single finish coat layer of El Bouhnini is different from that the exterior acrylic thermoplastic film of the present claims. It is disclosed in column 2, lines 15-32 that the exterior layer can be a film of acrylic resin or ABS resin as required by the structure in the present claims. Applicant argues that the present structure uses three thermoplastic layers a single fiber reinforced layer. El Bouhnini has three thermoplastic layers: (1) exterior layer of acrylic resin film (2) second layer comprising a thermoplastic resin such as polyester (3) a bonding layer wherein the resin can be the same resin as used in the second layer and a fiber reinforced layer wherein the reinforcing material is gypsum. The

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reference has the same structure as required in the present claims. Applicant argues that the first layer in the El Bouhnini reference is a gel coat layer. The reference discloses in column 2 that the exterior layer is an acrylic film as required by the present claims.

Applicant argues that the Domine reference is not combinable with the El Bouhnini reference.

Domine is a multi-layered composite and is analogous art for El Bouhnini. Domine was brought in to show that multi-layered composites could be used in various materials such as vehicle or boat components. Applicant argues that the composites in Domine reference are non-structural. It is disclosed in paragraph 0135 of the reference that the composites can be used in automotive and boat components. The rejections are maintained.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached at (571) 272-1398. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MILTON I. CANO
SUPERVISORY PATENT EXAMINER